PLATEAU® Herbicide Effect on True Mountain Mahogany

Keith Schoup

Terrestrial Habitat Biologist

Wyoming Game and Fish Department

Casper, Wyoming

Objectives

Determine effect PLATEAU® herbicide has on established true mountain mahogany plants

Objectives

- Determine effect PLATEAU® has on established true mountain mahogany plants
- Determine effect PLATEAU® herbicide has on true mountain mahogany regeneration

Objectives

- Determine effect PLATEAU® herbicide has on established true mountain mahogany plants
- Determine effect PLATEAU® herbicide has on true mountain mahogany regeneration
- Rate most effective to control spread of cheatgrass, and minimize effect on true mountain mahogany



* True mountain mahogany wildfire

© Occurred August 2000



- * True mountain mahogany wildfire
 - © Occurred August 2000
 - Burned approximately 2,000 acres

- * True mountain mahogany wildfire
 - Occurred August 2000
 - Burned approximately 2,000 acres
 - Contained small cheatgrass areas

- * True mountain mahogany wildfire
 - Occurred August 2000
 - Burned approximately 2,000 acres
 - Contained small downy brome areas
 - Cheatgrass proliferation following fire



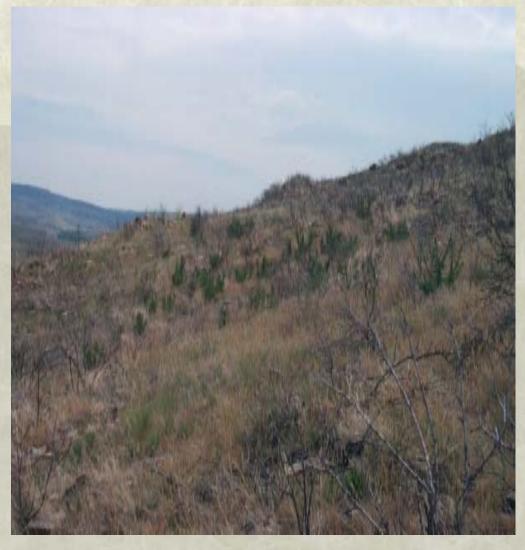
- PLATEAU®Herbicide Application
 - → Aerial application in October 2001



- Plateau HerbicideApplication
 - → Aerial application in October 2001
 - → Apply to 4-ten acre plots
 - → 6, 8, 10, and 12 ounces per acre rates



- PLATEAU®
 Herbicide Application
 - → Aerial application in October 2001
 - → Apply to 4-ten acreplots
 - → 6, 8, 10, and 12 ounces per acre rates
 - → Applied 6 and 12 ounce rates
 - → Weather conditions



* Herbicide Efficacy

- ⇒ 6 ounce rate
 - ✓ spotty control
 - √ cheatgrass present
 - musk thistle present



* Herbicide Efficacy

- ⇒ 6 ounce rate
 - ✓ spotty control
 - ✓ cheatgrass present
 - ✓ musk thistle p esent
- ⇒ 12 ounce rate
 - ✓ complete control
 - ✓ no cheatgrass presence
 - ✓ musk thistle eliminated
 - ✓ resurgence of native perennials

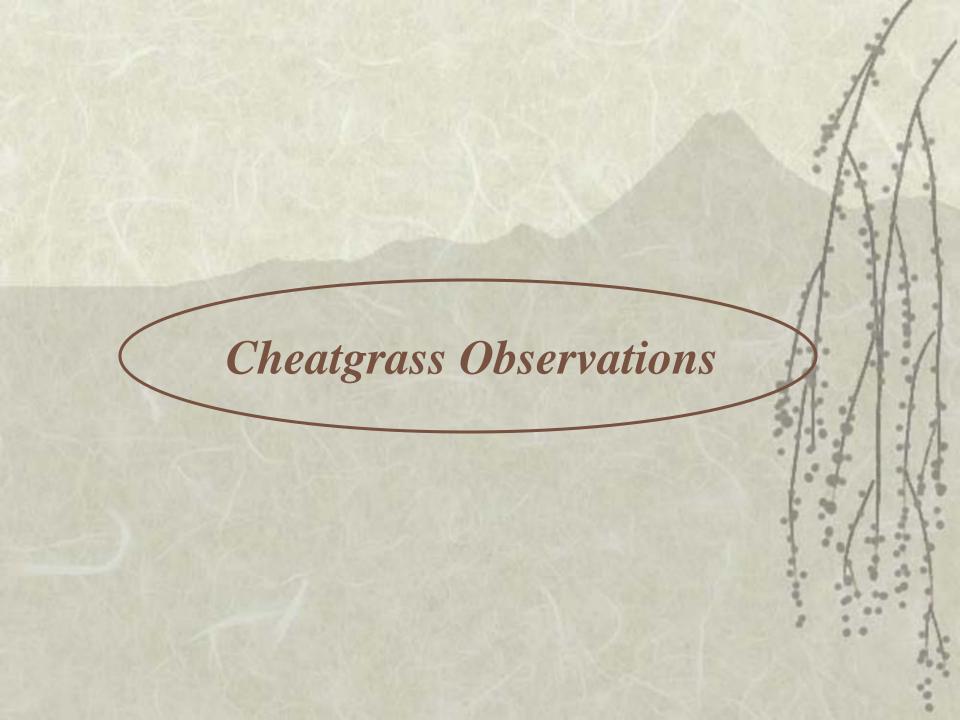


True MountainMahogany Response

- ⇒ stunted growth form
- ⇒ rolled leaves
- ⇒ plants appear to be set back



- True Mountain Mahogany Response
 - ⇒ stunted growth form
 - ⇒ rolled leaves
 - ⇒ plants appear to b set back
 - ⇒ slowed regeneration
 - ⇒ no documented mortality
 - one growing season postapplication
 - ⇒ extremely dry growing seasons



Cheatgrass Observations



- Found above 6,000 feet
- Located on various aspects
- Present on various soil types
- Associated with different vegetative community types

Cheatgrass Observations



Cheatgrass Observations



Questions and Comments

